

PATHWAYS

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No. 1

HUMAYUN'S TOMB

A— Project for Class VIII

The Educational Planning Group brought out a project booklet on Humayun's Tomb at the end of 1982. The booklet contained six worksheets and a note to the teacher. Having been associated with its production, I was keen to see the project in action.

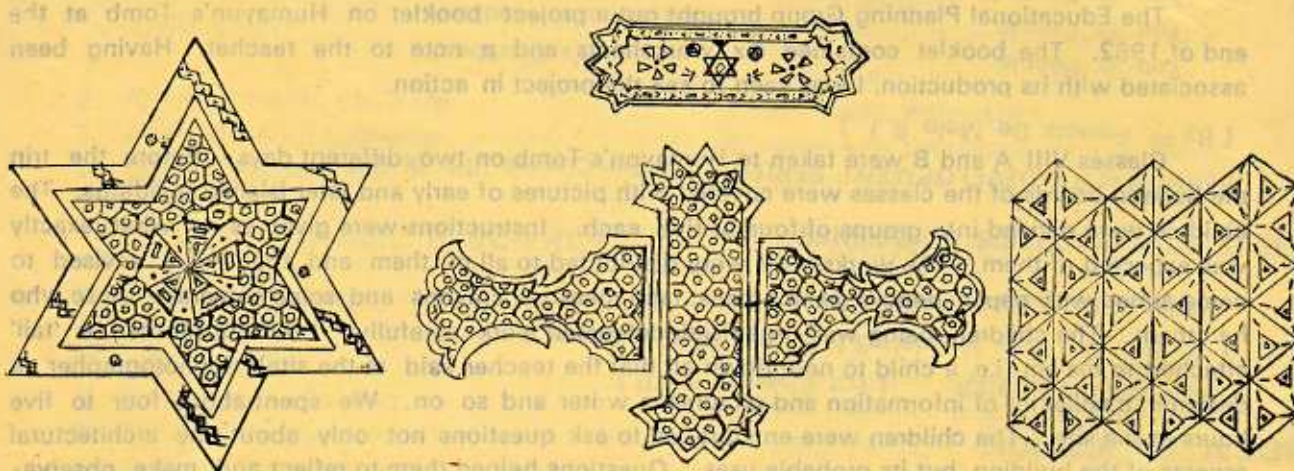
Classes VIII A and B were taken to Humayun's Tomb on two different days. Before the trip the bulletin boards of the classes were covered with pictures of early and later Islamic buildings. The children were divided into groups of four or five each. Instructions were given as to what exactly was expected of them. The worksheets were distributed to all of them and they were advised to come armed with paper, pencils, sketch pens, tape measure, crayons and some cameras - those who had them. The children, being well organised, delegated work carefully. Each group had a 'tail' attached to ma'am (i.e. a child to note down all that the teacher said at the site), a photographer, a designer, a collector of information and pictures, a writer and so on. We spent about four to five hours at the site. The children were encouraged to ask questions not only about the architectural aspects of the building, but its probable uses. Questions helped them to reflect and make observations. Where did the water for the gardens come from? Which direction does the Mihrab face? How do you think they kept the place warm in winter?

After a guided tour of Isa Khan's Tomb, the gardens, Humayun's Tomb and the two neighbouring tombs, the children were allowed to roam freely. They discovered and explored objects and points of interest. Most of them were excited at the rubbings they could make from the calligraphy on tombs, the designs on the pillars and the *jali* work. Some children proved quite resourceful, using several crayon colours over a rubbing to obtain particularly attractive results. Many of them measured the plinth area or made sketches of the tomb from different angles. Sitting down in their groups, they tried to fill in the details of the first worksheet. This worksheet required details about the structure of the tomb, the materials used, colour and symmetry.

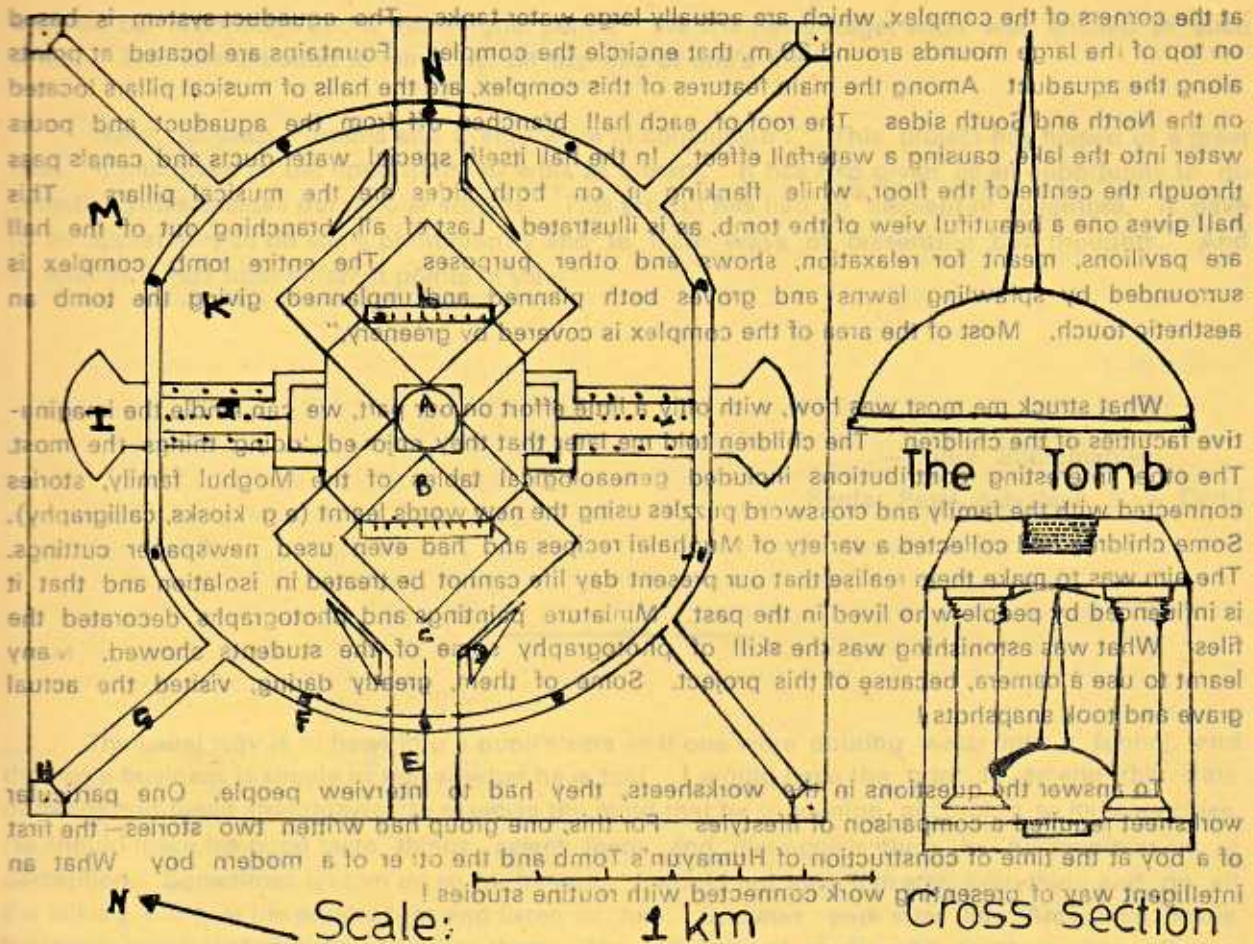
After the visit was over, the children got busy collecting information. Each student was required to work on any two of the other worksheets. We discussed our visit in class and I helped individual groups with their problems. A time limit of five weeks was given for completion of the work. About twenty-five files were submitted from both the classes.

Going through the files was not only interesting but also a heartening experience. Most of the groups had submitted models, jig-saw puzzles, a pamphlet on the tomb and a blueprint for a tomb of their own design, apart from their files. The covers of the files were imaginatively done—one file being in the shape of Humayun's Tomb itself. The pamphlets were cleverly designed, with a map of the tomb area, some photographs, a write-up and a list of places of interest in Delhi, places of worship and shopping centres. One pamphlet even had a note to the tourist on how to differentiate between the graves of men and women. The models were made of 'thermocole' and the jig-saw puzzles were made of a variety of interesting materials—wood, cardboard and thermocole.

Each file had an index, an introduction and a conclusion. Even the margins were gems of innovative work. All of them had a plethora of rubbings, perhaps the most colourful aspect of the work. Some of the rubbings were displayed on our main bulletin board, with instructions on how to make them. There was a wide range of designs for pillow covers, bed sheets, handkerchiefs using these rubbings. Apart from this, there were many designs made by using a combination of shapes seen at the Tomb. Some children had used cardboard cut-outs for this. Some of the designs are reproduced here.



An outstanding piece of work was the blueprint of a tomb designed by Nilanjan Gupta. It is reproduced here together with his write-up on it.



- A—The Tomb, B—The Lake, C—Pathway Intersection, G—Aqueduct,
- D—Rose Plots, E—Gate of Dawn, F—Fountains, H—Pentagonal minarets, I—Pavilion, J—Hall of musical pillars, K—Gardens,
- L—Spray fountain, M—Outlying Groves, N—Gate of Dusk,
- Dots indicate fountains

This tomb complex is based entirely on imagination and yet planned out with effects that are practically possible. The tomb itself has an unconventional design and is at the centre of the entire complex, which has a symmetrical layout. The dome of the tomb is constructed of black marble while the spire is of white marble. The construction material of the rest of the complex consists basically of marble and sandstone. Surrounding the tomb is a lake, the four corners of which are connected to the main pathways. On the East and West side of the lake are arranged spray fountains. When one enters in the morning from the Gate of Dawn, the light of the sun is broken down into its spectral colours, by the spray of these fountains, giving a magical touch to one's direct view of the tomb. The pathways split up around half to the tomb, giving four points of access to it, over the waters of the lake. Surrounding most of the complex, is a fairly large and intricate network of aqueducts. These aqueducts are supplied with water from the four decorative pentagonal minarets,

at the corners of the complex, which are actually large water tanks. The aquaduct system is based on top of the large mounds around 20 m. that encircle the complex. Fountains are located at points along the aquaduct. Among the main features of this complex, are the halls of musical pillars located on the North and South sides. The roof of each hall branches off from the aquaduct and pours water into the lake, causing a waterfall effect. In the hall itself, special water ducts and canals pass through the centre of the floor, while flanking it on both sides are the musical pillars. This hall gives one a beautiful view of the tomb, as is illustrated. Last of all, branching out of the hall are pavilions, meant for relaxation, shows and other purposes. The entire tomb complex is surrounded by sprawling lawns and groves both planned and unplanned, giving the tomb an aesthetic touch. Most of the area of the complex is covered by greenery."

What struck me most was how, with only a little effort on our part, we can kindle the imaginative faculties of the children. The children told me later that they enjoyed 'doing' things the most. The other interesting contributions included genealogical tables of the Moghul family, stories connected with the family and crossword puzzles using the new words learnt (e.g. kiosks, calligraphy). Some children had collected a variety of Mughalai recipes and had even used newspaper cuttings. The aim was to make them realise that our present day life cannot be treated in isolation and that it is influenced by people who lived in the past. Miniature paintings and photographs decorated the files. What was astonishing was the skill of photography some of the students showed. Many learnt to use a camera, because of this project. Some of them, greatly daring, visited the actual grave and took snapshots!

To answer the questions in the worksheets, they had to interview people. One particular worksheet required a comparison of lifestyles. For this, one group had written two stories—the first of a boy at the time of construction of Humayun's Tomb and the other of a modern boy. What an intelligent way of presenting work connected with routine studies!

One of the groups introduced their team in a unique way—a photograph of each child doing his or her allotted job. The captions read like this: Atul Fant—our photographer and editor (with the camera hung round his neck) Vivek Jain—our script writer (sitting down with a note pad.) All the photographs had the tomb as the background.

All this involved ingenuity, planning and the cooperation of all the students in the group. Each child contributed what he could do best and in this way the efforts of even an academically weak child were recognised. This point was brought home poignantly by one of the students when asked a question by a visiting school teacher, who saw the files exhibited in our school. There was healthy competition between the groups which worked in great secrecy. Their interest in History and historical buildings has definitely grown since this work.

Finally, I quote from two of the files. This would give you an idea of how the children felt about the project.

Sangeeta Gupta, Rashmi, Pooja, Aika write:

'This project on Humayun's Tomb is the most and the only interesting project we have ever done. Whenever our teachers used to tell us that our knowledge will increase if we make projects, we thought it was just a waste of time. This project was not only interesting but it helped us to

increase our knowledge about the Mughal period. We will never forget what was studied in such a way. That one is bound to remember till the end of one's life".

Neha, Jasdeep, Purnima and Manju write in conclusion : "This project has helped us a great deal. It has given us the opportunity to work as a team. It has also given us an opportunity to do something else besides our regular studies. This project has had an element of adventure. It gave us an opportunity to do some photography and to learn ways of presenting our thoughts. And to look at things from different points of view".

—Chitra Subramaniam

Sardar Patel Vidyalaya, New Delhi

The usual way is to bawl into a pupil's ears as if one were pouring water into a funnel, and the boy's business is simply to repeat what he is told. I would have the tutor to amend this state of things and begin straightaway to exercise the mind that he is training according to its capacities. He should make his pupil taste things, select them, and distinguish them by his own powers of perception. Sometimes let him do so for himself. I would not have him start everything and do all the talking, but give his pupil a turn and listen to him. Socrates, and after him Arcesilaus, made his pupils speak first and then spoke to them. The authority of those who teach is very often a hindrance to those who wish to learn.

—Montaigne

[Did you know that this passage was written nearly 400 years ago ?]

We assume that all thought is already long long ago adequately set down in books—all imaginations in poems; and what we say we only throw in as confirmatory of this supposed complete body of literature. A very shallow assumption. Say rather all literature is yet to be written. Poetry has scarcely chanted its first song. The perpetual admonition of nature to us, is, "The World is new untried. Do not believe the past, I give you the universe a virgin to day."

from *Literary Ethics* by Ralph Waldo Emerson

MY TEETH

Here are a few sets of questions and some activities that can be tried with children to set them thinking and to reinforce classroom learning of a unit on teeth.

Concepts :

1. Human beings have two sets of teeth in their life span—milk teeth and permanent teeth, the former set are twenty in number and the latter thirty-two in number.
2. The teeth are designed to perform specialised functions.

Activity 1

Ask the children to guess the number of their teeth (The children usually give wrong answers). Then allow them to count their teeth. Why do all the students in class have different numbers of teeth ?

Activity 2

Tell the students to eat a morsel of any foodstuff (eg. a piece of bread) and note carefully the functions of the various kinds of teeth.

Teeth are like scissors, spears, and grinding stones (Note : The terms : scissors, spears, and grinding stones will have to be explained to the students) The students could discuss this statement orally or in writing. Which teeth correspond to each of these categories ? Point them out in a child's mouth. Provoke more discussion. Do the teeth play a role in speech ?

Concept :

The teeth of some animals are adapted to perform more specialised functions.

Questions :

Do the teeth in all animals perform the same kind of functions as in human beings ? If not how does the function of teeth differ in an elephant, a hippopotamus, and in snakes.

Concept :

1. Teeth need care.
2. Certain foods are good for the teeth while some are harmful.

Activity :

Instruct the children to collect food wrappers and pictures of foodstuffs. Then ask them to classify their collection under two headings foods that are harmful for their teeth and those that are good for their teeth. These can be made into two collages.

Follow-up Questions :

1. Why did you classify particular foods as good or bad for the teeth ? (This would lead to a discussion on diet and nutrition).
2. We need calcium, phosphorus, and vitamins to build strong and healthy teeth. What kind of foods provide these ?

—Arti Laroia

Motivating Learning in Maths

At last a primary math series for the NCERT syllabus that is all you ever wanted ... but were afraid to ever hope for !

Oxford University Press's PRIMARY MATHEMATICS FOR INDIA, Introductory to Book 5 will be ready by August/September, 1984. Originally entitled OXFORD PRIMARY ARITHMETIC COURSE, written by Downes and Paling and printed in London, the books have been up-dated by Downes and Paling in collaboration with master-teacher, Mrs Shamlu Dudeja, who has done a magnificent job of Indianising the material and presenting the matter in such a way as to appeal to the child and also be extremely practical, down-to-earth and useful to the classroom teacher, the parent and the tutor.

The books squarely face Indian school reality in a subtle, but effective way. If the child is lucky enough to be enrolled in a "good" school, the books are excellent, for all the notes, guide-pages, etc. will be fully utilised by alert and well-trained teachers. If the teachers are alert, but not well-trained, the clearly-written appendices and page notes and illustrated suggestions for making teaching aids and math

games will be enough to assure effective teaching. If the child misses out on account of his/her school or teacher, nothing to fear : a loving parent (who can read English) or a diligent tutor can still save the day.

I have in front of me Books 1 & 2. They are in a large workbook type format with attractive, effective, lively and very "Indian" drawings in two colours. The general design of the books and the illustrations will not only motivate the children, but (even more important) they will do so while supporting and clarifying the mathematical content of the books. The books will be a pleasure to learn from.

And they will be a pleasure to teach from. This is an outstanding series of books and deserves to be brought to the attention of all school personnel who are in a position to "inspect" and select math textbooks for Indian schools.

—Mary Ann Dasgupta
Education Adviser
Kanoria Chemicals &
Industries, Calcutta

YOUR ATTENTION PLEASE

PATHWAYS is issued four times a year — in February, April, August and November. The annual subscription is Rs 8/- only. Please send this in as a Money Order or cheque (add outstation charges, please) to the Educational Planning Group, 4 Raj Niwas Marg, Delhi 110054. This entitles you to all the 4 issues of that calendar year. **Remember to include your complete and correct postal address, including the Pin Code.** Back numbers can be obtained for Rs. 2.50 each (including postage.)

Low-Tension Transistorised Battery Eliminator

—A SCIENCE PROJECT

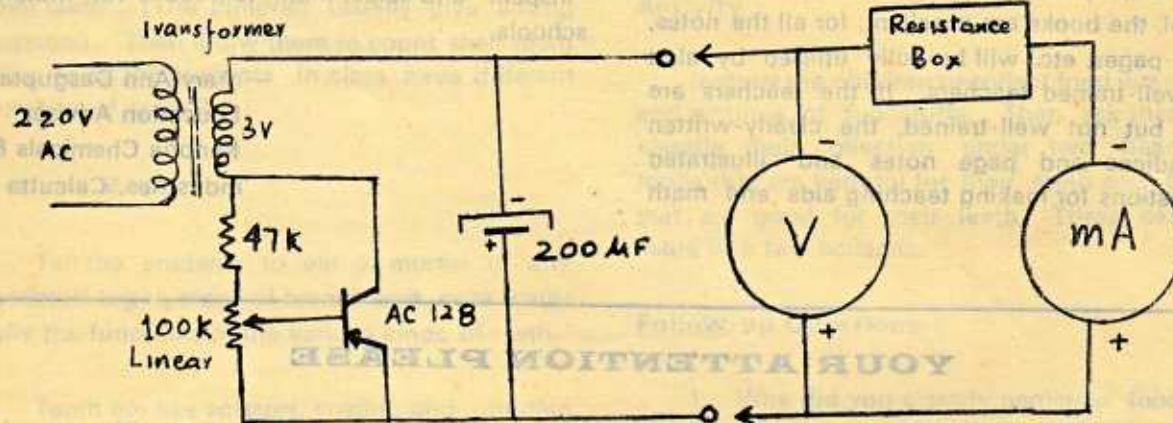
By LALIT KISHORE

Principal, Central School, Tenga Valley-790115, Arunachal Pradesh

Construction and Development

To construct the transistorised battery eliminator you will need the following components.

1. Transformer = 1 (220V to 3 V, Step down, 200 mA)
2. Potentiometer = 1 (100 K, Carbon track, linear)
3. Resistor = 47 K
4. Capacitor = (500 μ F, Electrolytic, 6 V)
5. Tag-strip = 1
6. Voltmeter = 1 (0–5V, D.C.)
7. Milliammeter = 1 (0–200mA)
8. Lunch box = 1
9. Resistance box = 1
10. Terminals = 2
11. Knob = 1



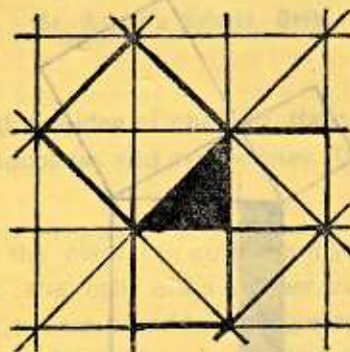
Hook-up the circuit on the tag-strip and house it in the lunch box. Connect the output terminals of the battery eliminator circuit to the resistance box, voltmeter and milli-ammeter as shown.

Activities

- 1) Investigate how the output voltage and current change with the angle by which the potentiometer knob is turned.
- 2) Investigate how the output voltage changes with the load resistance introduced from the resistance box.
- 3) Investigate how the output current changes with the load resistance.

PYTHAGORAS' THEOREM

Pythagoras was a famous Greek mathematician who lived about 540 B.C. He is said to have discovered the theorem which bears his name while looking at the tiles on the floor of an Egyptian palace. This is shown alongside. It is a very special case where the triangle is formed by cutting the square along a diagonal.



Here are two interesting exercises on the theorem for your students.

EXERCISE 1 :

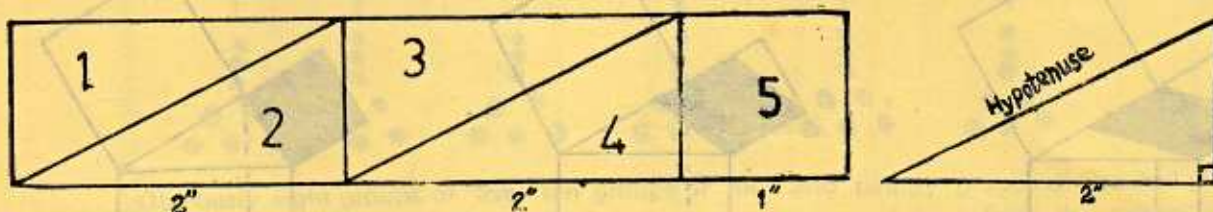
You will need two rectangles of card, each 5 inches by 1 inch, scissors and glue.

Draw the triangle shown, in the centre of a sheet of paper. Mark out the first card as shown in the figure. Cut it into its five pieces.

Assemble pieces 1, 2, 3, 4 to form a square. Paste this square in position on the 2 inch side of the triangle.

Paste piece 5 on the shortest side of the triangle

Cut the second rectangle also into five pieces and assemble all of them into a square. Do this carefully. You will need to cut up piece 5 into smaller parts. Paste this square on the hypotenuse of the triangle.



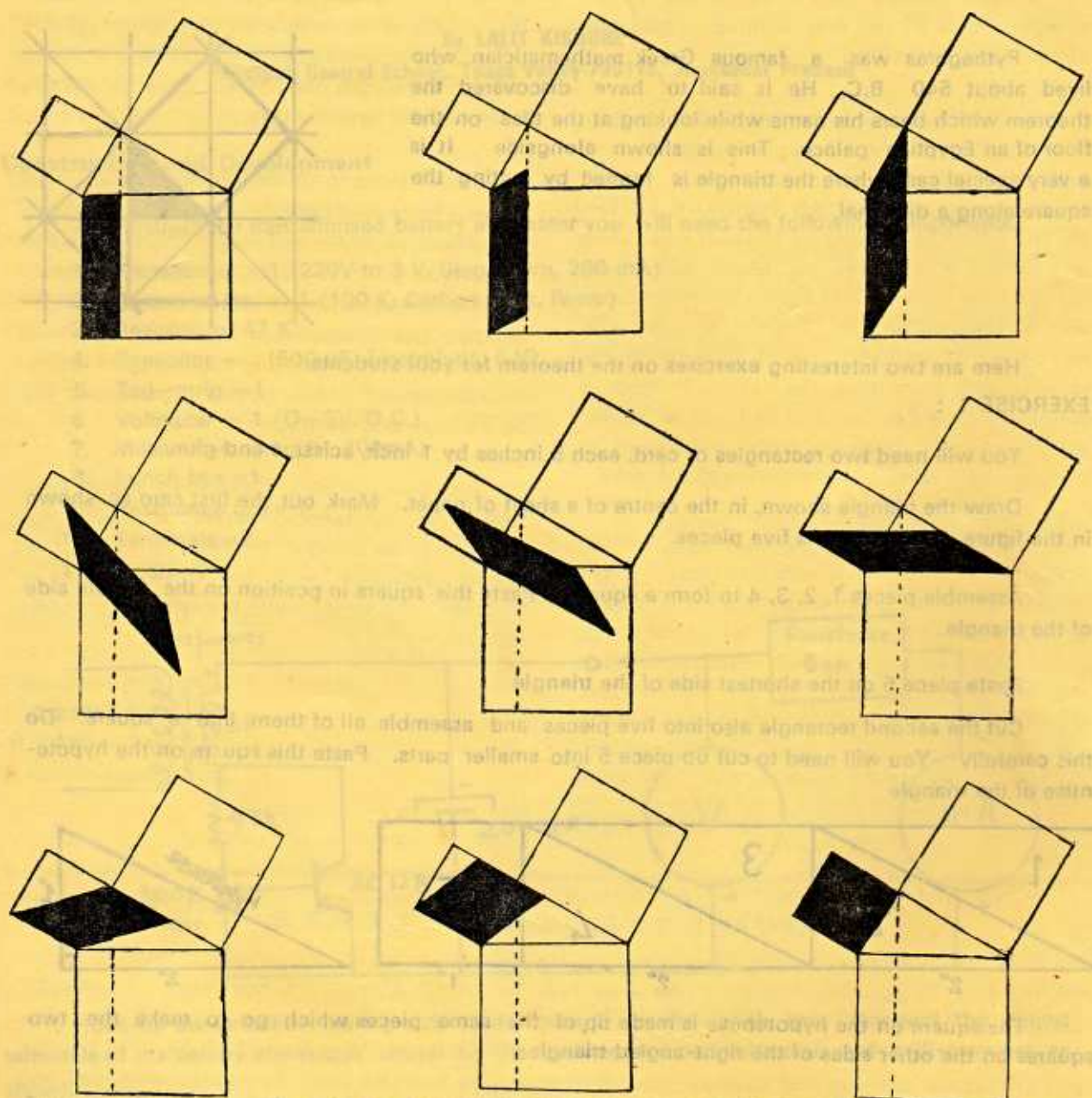
The square on the hypotenuse is made up of the same pieces which go to make the two squares on the other sides of the right-angled triangle.

This shows that the area of the square on the hypotenuse is equal to the sum of the area of the squares on the other two sides of this triangle.

EXERCISE 2 : A 'RIFFLE' BOOK

This consists of a number of pages in which each diagram differs slightly from the one on the preceding page. One such sequence is shown in the figure here. Duplicate a large number of

outlines and put in some more intermediate positions. When the pages are put together and 'riffled' with the thumb an appearance of motion is obtained.



The left-hand rectangle of the bottom square is transformed into the small square. Exactly the same procedure will transform the right-hand rectangle into the top right square. This shows that the largest square is equal to the sum of the other two squares and is Pythagoras' Theorem once again.

This could be treated as a class activity. Make a template (outline) for the rotating part.



INTRODUCING DIVISION

by PEARL SCOTT

St. Xavier's School, Delhi

By the time a child is seven years old, he is already familiar with the idea of **sharing**. He has watched his mother make **equal shares** of cakes, apples, toffees, chocolates and even money. The idea of division is an easy extension of this sharing.

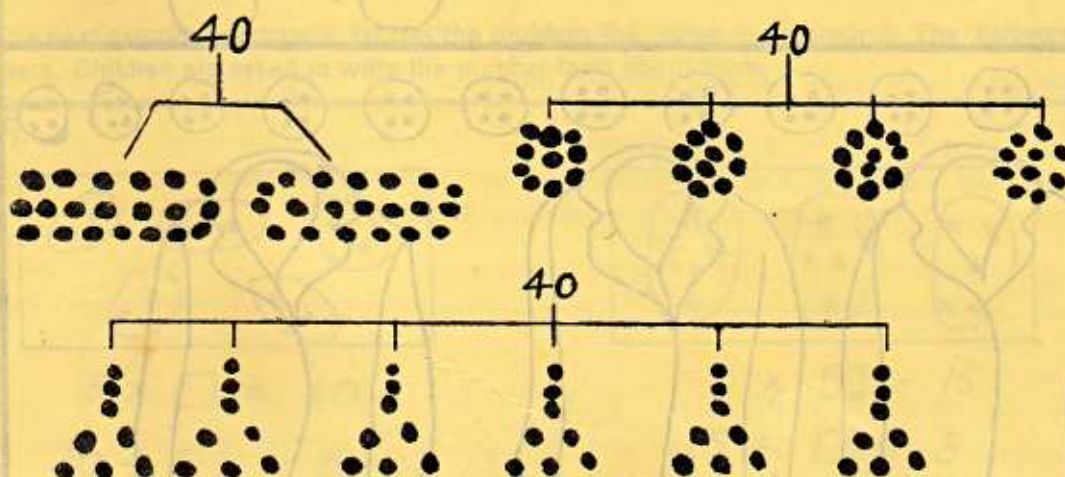
Begin by playing the Grouping Game. All the pupils run around the class (or outdoors if you prefer) in a circle. The teacher claps her hands. When she stops, she calls out a number, say, " Three ". The pupils run and get into groups of three each. Those left out are asked to sit down and the game continues. After a few more rounds the teacher calls their attention to the **equal numbers in each group**.

Follow-up work on the blackboard demonstrates how a number like forty can be divided into groups in many different ways Thus

$$2 \times 20 = 40$$

$$4 \times 10 = 40$$

$$5 \times 8 = 40$$



Obviously eight groups of five, ten groups of four and twenty groups of two will give the same result. To reinforce the idea further obtain some *neem* leaves from the school garden. Distribute used envelopes and a handful of leaves to each child. Let each child take out twelve leaves and sort them into equal shares, in many ways, with six, four, three and two in each subset.

Discussion with the pupils will lead them orally to the concept that from each multiplication fact, two division facts can be derived.

Thus $3 \times 4 = 12$, $12 \div 3 = 4$ $12 \div 4 = 3$

Next take 24 leaves out of the envelopes. Make them into equal shares. Group 2,3,4,6 and 12 the in subsets. The children will then be able to help the teacher write the facts about 24 like these.

$$12 \times 2 = 24$$

$$24 \div 12 = 2$$

$$24 \div 2 = 12$$

$$8 \times 3 = 24$$

$$24 \div 3 = 8$$

$$24 \div 8 = 3$$

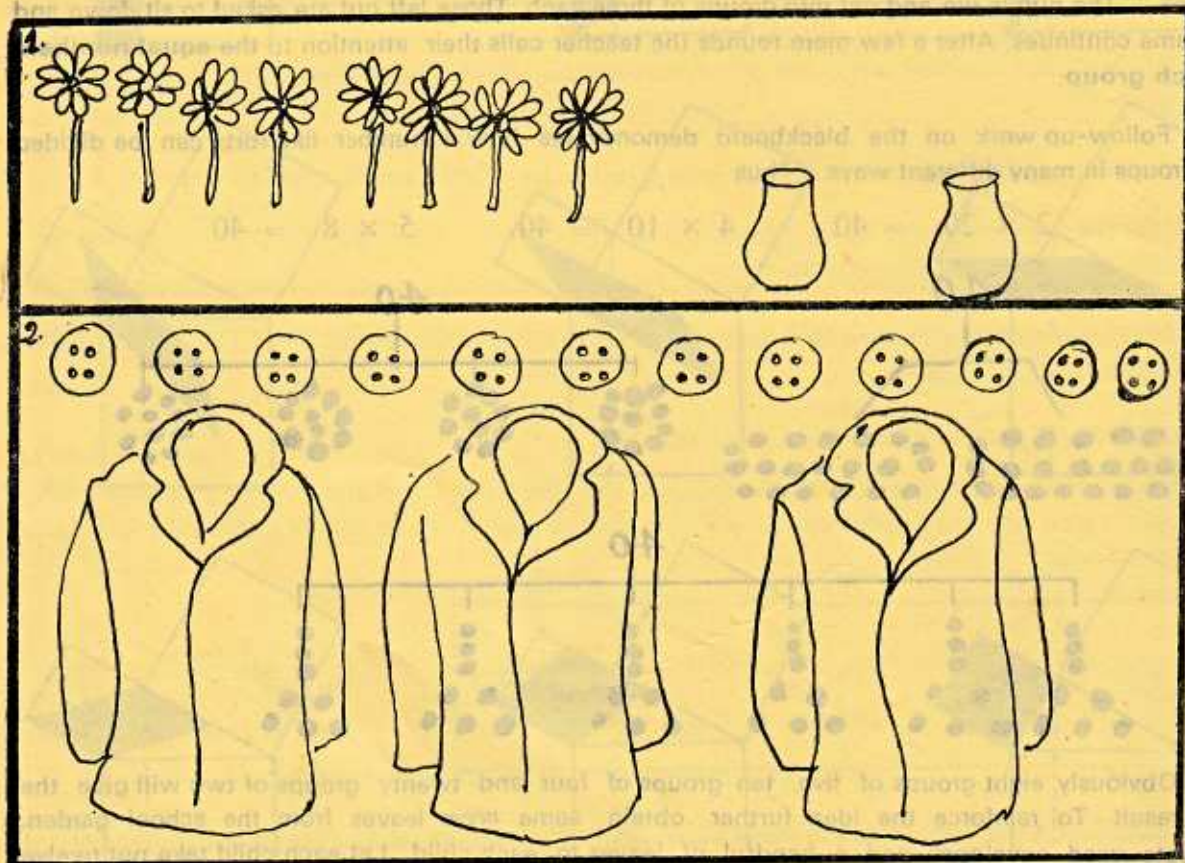
$$6 \times 4 = 24$$

$$24 \div 4 = 6$$

$$24 \div 6 = 4$$

They are now ready for a worksheet containing exercises of the type shown below. I use these and many others in the Mathematics Laboratory of St. Xavier's School, where I work. Pupils fill in the required answers and colour the drawings wherever possible. A large variety of exercises can be cyclostyled and given for practice. It is possible to make them interesting by pictures of different kinds. Here are some samples.

1. Share these 8 flowers between the 2 vases. Draw the flowers in the vases. There are flowers in each vase.



2. Share these 12 buttons equally between 3 coats. Draw the buttons on the coats. There are buttons on each coat.

In this particular article I have reproduced only the first two exercises. Additional picture exercises are as follows :

3. Here are 15 eggs. Share them equally in these 5 nests. Draw them. $15 = 5 \times \square$
4. Here are 18 candles. Put an equal number on each cake. (Three cakes are drawn). cakes have candles each on them. $18 = 3 \times 6$.

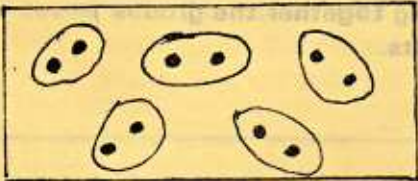
5. There are 24 beads. Draw an equal number on each string. (First string is shown with four beads. There are five more strings). $\square$ strings have $\square$ beads each on them. $24 = 4 \times 6$.
6. This exercise shows them pictures of 12 sweets and 4 children. How many sweets? $\square$. How many children? $\square$. $12 = \square \times 4$.

We return to practical exercises. In the laboratory I have a collection of bottle caps—easily obtained from the school canteen. Each child takes the required number of bottle caps and works through the following exercise.

7. Take 12 bottle caps.
 Make 2 equal subsets. $12 = 2 \times \square$
 Make 3 equal subsets. $12 = 3 \times \square$
 Make 6 equal subsets. $12 = 6 \times \square$
 Make 4 equal subsets. $12 = 4 \times \square$
8. Take 18 bottle caps.
 Make 2 equal subsets. $18 = 2 \times \square$
 Make 9 equal subsets. $18 = 9 \times \square$
 Make 3 equal subsets. $18 = 3 \times \square$
 Make 6 equal subsets. $18 = 6 \times \square$

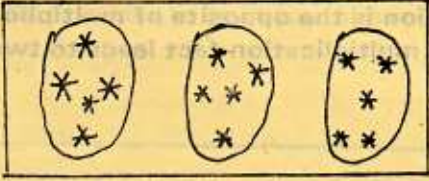
The next exercise, number 9, tackles the problem the other way around. The pictures show the subsets. Children are asked to write the number facts about them.

9.



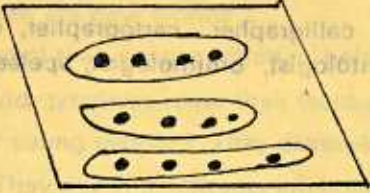
$$5 \times \square = 10$$

$$10 \div \square = 5$$



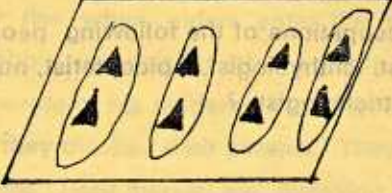
$$3 \times \square = 15$$

$$15 \div \square = 3$$



$$3 \times \square = 12$$

$$12 \div \square = 3$$



$$4 \times 2 = \square$$

$$8 \div 2 = \square$$

Another exercise involves the use of a strip of paper. Most schools have large quantities of paper which is typed or cyclostyled on one side only. This may be used here. The instructions to the children read as follows :

10. Take a strip of paper. Fold it in half. Colour half of it red. You have divided the strip into two equal parts. Take another strip. Divide it to make four equal parts. Colour each part differently.

Exercise 11 asks the children to count the number of equal parts into which a variety of geometrical figures are divided.

Finally exercise 12 has six parts and goes like this :



Colour in two's. How many 2's are there ? ☐



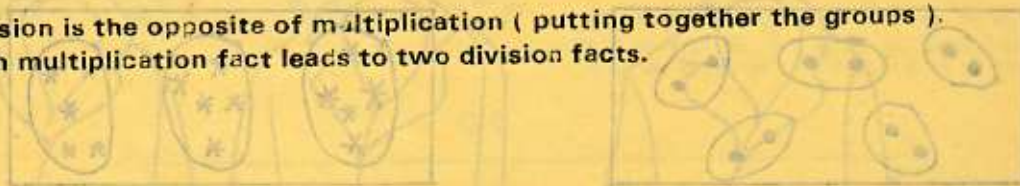
Colour in 4's. How many 4's are there ? ☐

Before the idea of division is firmly fixed in the childrens' minds, they go through perhaps, another four such worksheets. Each worksheet consists of a foolscap size paper, cyclostyled on both sides and folded in the middle to make four notebook - size pages. It is completed during a double-period session which the children spend in the mathematics laboratory once a week. Classroom work reinforces the concepts. Teachers can make up many similar exercises on their own. I have only shared a few of mine here.

The main concepts that one tries to get across to the students are :

Division is a process of sharing out into a number of groups, all containing an equal number.

**Division is the opposite of multiplication (putting together the groups).
Each multiplication fact leads to two division facts.**



What Do They Do ?

What are the occupations of the following people : Apiarist, calligrapher, cartographer, dendrologist, horologist, ichthyologist, lepidopterist, numismatist, odontologist, ornithologist, spelaeologist, thaumaturgist, trichologist ?

ANSWERS :

bee-keeper, hand-writer, map maker, tree-surgeon, watch maker, fish breeder, butterfly collector, pot-holer (climbing through holes in mountains and caves)
miracle worker, hair dresser.

YOU AND YOUR TEXTBOOK

The textbook is probably the most commonly used tool of a teacher. Each year many hours are spent in the selection of textbooks—within the limited range available to us in India. Most of us use these textbooks in one or in a combination of the following ways. What do you do?

1. Your textbook is your 'Bible'. Start at the first page of chapter one and get children to read its 'gospel truth' and carry out some (or all) of the suggested activities.

The textbook can never be wrong! Even if the answers to maths problems don't tally with what the children produce.....The views of the author are the only correct one, and children are advised that it is best to quote extensively (memorise?) from the text.....

2. The textbook is a sound basis for the syllabus. A few chapters may be deleted from the course with the concurrence of your

colleagues, but all the rest must be studied thoroughly.

Perhaps you may like to use additional examples from other books (in mathematics), show pictures from other sources or enrich your lesson *sometimes* with teaching aids or child-centred activities.

3. Your textbook is one of the 'tools' in your 'toolchest' You use a variety of textbooks (especially when preparing your lesson) and view them more as 'tools' than as the 'syllabus'. More often than not, you teach the content (preferably in your own words) and use the text-book to sum up, consolidate and revise concepts. Since the textbook is only one of the possible 'tools', you are always on the look-out for new ways of presenting your lesson, for teaching aids (improvised or ready-made), for pupil activities and other ideas which make it really enjoyable to be in your classroom.

A tablet from ancient Assyria, about 2800 BC, has been found that states: Our earth is degenerate in these latter days. There are signs that the world is speedily coming to an end. Bribery and corruption are common. More than 2000 years later, Socrates complained, 'Children are now tyrants... They no longer rise when elders enter the room. They contradict their parents, chatter before company, gobble up dainties at the table, cross their legs and tyrannise over their teachers.' And Plato wrote of his students: 'What is happening to our young people? They disrespect their elders, they disobey their parents. They ignore the law. They riot in the streets inflamed with wild notions. Their morals are decaying. What is to become of them?'

Experience-Based Learning

by

UMA SUBRAMANIAM

One of the surest ways to make education more meaningful is to enable a child to make all learning a part of his own experience. This is possible when a skilful teacher (some schools have a full-time social worker) consciously structures a programme whereby a child learns through his actual participation.

Aims and Objectives

One of the basic aims is to confront the child with the realities around him so that they have a direct bearing in the formation of his attitudes and values. Repeated exposure to a situation enhances a child's powers of observation, heightens his sensitivity as a human being and arouses his social consciousness.

Content and Structure

Under the Socially Useful Productive work (or SUPW) some schools are offering an exposure to community service and the child is graded on the basis of his interest, participation and his ability to think through a problem.

Methodology

Prior to the child's actual field experience an orientation programme is organized which helps the student to know what he is expected to look for, what he would be expected to do and how exactly he would be graded. As the exposure is itself a break from the traditional class-room learning, initially the child has to be prepared to benefit from such experience and in my opinion a two week period (wherein three block periods are allotted at a stretch) is essential.

The orientation programme is a combination of talks, group discussions, screening of thought-provoking movies (like the one by UNICEF on Water), role-plays on social problems like dowry, caste system, or population explosion and simulation games. These games are built around situations which approximate to real-life situations for e.g. children are given various occupations and the possible income bracket they are likely to be in. Within a specific time they are required to prepare a budget for their own families.

Given below are just two instances by which a child's attitudes can be tested.

- a) How would you introduce a mentally retarded sister to your friend at school? A thirteen-year old youngster said "I would not say she is mentally retarded, for, she also has a heart and I would not want her to feel hurt"
- b) Suppose you are the manager of a posh hotel and a group of labourers who constructed it want to have a look at it, what would you do? A ninth grader said, "I would let them in through the back door"

Community Service

A wide range of activities can be included under community service. A few instances are Hospital Social Service, working with the handicapped—the blind, the deaf and the retarded, conducting of non-formal education classes, working in day-care centres and old age Homes. Although the list is not exhaustive, the possibilities are varied and challenging.

Evaluation

Since learning in the realm of acquiring attitudes cannot be linear, the teacher at best can only guide and evaluate. In essence it is a life-long process. It is essential that periodic feed-back sessions are held at regular intervals so that the children can pool and share their experiences and think of possible solutions. As all social problems are not capable of easy solutions children's efforts have to be constantly encouraged so that they are not bogged down and frustrated.

After a year's exposure to conducting a non-formal educational class in an urban slum the children were asked to imagine themselves as the slum children and voice their expectations. Given below are some of their candid comments.

"I think the school girls should improve their ways to control the boys and girls who keep running all over the place."

"I have experienced that the girls who are teaching us are sometimes rude and pass bad remarks about us".

"These people come and show their superiority whereas we expect them to be polite and diligent".

"I think they are just doing all this for the sake of marks. Such an exercise will not last long".

"They should be using coloured and decorative things to explain to us. Why can't they tell us more stories and make the lessons attractive".

"Only in retrospect would these ninth graders know what profound truths about themselves-they have learnt.

Use More Do's Than Don'ts

How do you as an adult — a parent or a teacher — communicate with children. Listen carefully to what you say.

Tell the child what to do rather than what not to do. Using "Do's" rather than "Don'ts" is very difficult, especially if adults already have the "don't" habit. It is very difficult to break bad habits. Using "Do's" rather than "Don'ts" requires much thought and practice. However, the improvement in your relationship with your child will make it worth the effort.

The Don'ts

Don't scatter your clothes here and there.

Don't run around in the rooms.

Don't slam the door.

Don't draw on the walls.

Talk to children as you talk to your friends. If adults would talk to children with as much consideration as they talk to their friends, they could really communicate with children and be on the way to excellent relationships.

The Do's

Fold your clothes properly and keep them in place

Go and play outside.

Close the door softly, please.

You can color on this page.